



WWF Submission on Increasing pre-2020 Mitigation Ambition through scaled up Renewable Energy and Energy Efficiency Initiatives

WWF is pleased to submit this document pursuant to paragraphs 5 and 6 of FCCC/ADP/2013/L.2 and the request for submissions on actions, initiatives and options to enhance ambition, including through the workplan on enhancing mitigation ambition, with a particular focus on 2013, including aspects indicated in paragraph 31 of the ADP conclusions contained in document FCCC/ADP/2012/3.

This submission presents WWF's views and proposals on the role of the UNFCCC to contribute to closing the emissions gap (estimated to be between 8-13 Gt¹) between now and 2020 through the enhancement and scaling up of initiatives related to energy efficiency and renewable energy.

INTRODUCTION

WWF recognizes that significant progress in the UNFCCC must be achieved in order to ensure that global emissions peak well within the decade, most importantly through strengthening the currently inadequate emissions reductions commitments and pledges, especially from developed countries. In addition to scaled up targets for developed countries, complementary measures have an invaluable role to play in reducing the emissions gap up to 2020 and creating a positive momentum in the UNFCCC process. UNEP², the IEA³, the UNFCCC itself⁴ and various other authors and institutions have identified possible interventions that could reduce emissions in line with climate science. WWF believes that the UNFCCC can play a critical role in ensuring that these mitigation opportunities are realized. To achieve this, parties must move towards *implementing* ambitious concrete initiatives and beyond merely *identifying* opportunities.

In the interest of urgent action this submission will focus on how an initiative to scale up renewable energy and energy efficiency (RE & EE) could be rolled out using the institutions, resources and capacity for mobilization of the UNFCCC. The Alliance of Small Island States

¹UNEP. 2012. Emission Gap Report 2012. Available at <http://www.unep.org/pdf/2012gapreport.pdf>.

²UNEP. 2012. Emission Gap Report 2012. Available at <http://www.unep.org/pdf/2012gapreport.pdf>.

³International Energy Agency. 2013. *Redrawing the Energy-Climate Map*. Paris. Available at <http://www.iea.org/publications/freepublications/publication/name,38764,en.html>

⁴UNFCCC Technical Paper FCCC/TP/2013/4

(AOSIS) has already shown support for such an initiative through their submission in May 2013⁵. There is a golden opportunity now for Parties to build on this proposal.

Through the institutions that have been created under the UNFCCC over the past two decades, the global climate regime has the capacity to play a powerful coordinating role for global climate actions at various scales in line with the objectives of the Convention. Despite successes in setting up these institutions, implementation of concrete emission reduction actions has been hampered by a lack of political commitment.

The time is ripe for the UNFCCC to start acting as an effective implementation forum, in addition to its traditional role as a negotiating forum. This will require a shift in mindset of parties and negotiators and a concerted effort to separate these two roles as much as is feasible. Undoubtedly there are times when it is necessary for Parties to be in negotiation mode but, given the urgency of the problem, there are also times when Parties need to work much more cooperatively to urgently ensure the implementation of mitigation and adaptation actions. Parties need to recognize that they should work together on the rollout of complementary actions under ADP Workstream 2. If parties take a pragmatic, urgent and results-oriented approach to the initiatives proposed here, the UNFCCC can play a unique and valuable role in mobilizing financial and technological resources, sharing knowledge, and building support and momentum around crucial actions to close the emissions gap in the short term. WWF believes that facilitating the scale up of renewable energy and energy efficiency presents a concrete opportunity to achieve this.

This submission will expand on the decisions that WWF believes that the UNFCCC should take in Warsaw to facilitate the scale-up of Renewable Energy and Energy Efficiency namely:

1. Creating a framework for action on scaling up RE & EE under the UNFCCC in a way that sends a powerful policy signal to investors and governments on the nature of future global energy supply
2. Mobilising the existing financial, technological and capacity building institutions of the UNFCCC to drive a global scaling up of RE & EE, which results in at least 25% of global energy being sourced from renewables (excluding traditional biomass) by 2020.
3. Requesting developed countries to submit RE & EE targets in addition to any existing domestic targets and lead in their contribution to achieving the 25% of energy sourced from renewables (excluding traditional biomass) by 2020.
4. Requesting developing countries to present additional RE & EE projects and programs as Nationally Appropriate Mitigation Actions (NAMAs) and to prioritize these NAMAs for support through scaled up finance, capacity building and technology transfer.

WHY SCALING UP RE & EE IS CRITICAL

The global energy sector is the largest single contributor to man-made climate change, accounting for two thirds of global emissions⁶. According to the IEA, between two thirds and 80% of all remaining fossil fuel reserves need to stay in the ground and not be used⁷ to avoid 2°C of warming. If we want to achieve the ultimate objective of the Convention, the fossil fuel based energy sector has to fundamentally change over the coming decades. Due to the

⁵AOSIS non paper for ADP workstream 2, May 2013.

⁶WWF and Ecofys. 2011. The Energy Report. www.panda.org/energyreport

⁷IEA, World Energy Outlook 2012 (<http://www.worldenergyoutlook.org/>) and CarbonTracker. Unburnable Carbon 2013: Wasted capital and stranded assets (<http://www.carbontracker.org/carbonbubble>)

maturity of relevant technologies RE & EE scale-up offers excellent potential to close the existing emissions gap by 2020 while making it much easier to achieve longer-term targets and global economic transition. Taken together renewable energy and energy efficiency improvements could contribute to closing the emissions gap by **1-2.5 Gt CO₂eq** and up to **4-5 Gt CO₂eq**⁸ respectively by 2020.

Energy efficiency and renewable energy technologies are mutually reinforcing. Presently, renewables account for about 10% of global energy supply (excluding traditional and inefficient biomass use in developing countries which accounts for another 10% of all primary energy use). Double digit growth rates for renewable energy sources such as wind and solar over the last years have been impressive but has not limited the growth of total energy consumption which experienced a growth of almost 30% between 2002 and 2012. Most of the growth in energy consumption has been based on coal and other fossil fuels, hence the continued growth of CO₂ emissions and concentrations. Even though renewables saw investment growth of up to \$US 250 billion over the last years fossil fuels still received four times more investments as recently as 2012⁹. It is clear that a stronger internationally coordinated effort is needed to reverse this trend.

Climate Analytics¹⁰ estimates that a share of 15-20% of renewables globally by 2020 would close the emissions gap by 2 to 3 Gt CO₂. WWF proposes that an UNFCCC agreement on an objective for renewables (excluding traditional biomass) to contribute 25% of energy by 2020, would go a long way towards putting the energy sector on a decarbonisation path by 2050 while saving 3.5 Gt CO₂ by 2020¹¹. The UNFCCC could catalyse such a scale up of renewable energy by:

1. Providing a strong policy signal in favour of a 25% aggregate global renewable energy target;
2. Encouraging developed countries to commit to additional renewable energy targets in line with this objective and
3. Encouraging developing countries to submit renewable energy NAMAs and linking these to support from the institutions of the UNFCCC.

With the correct international framework in place countries will have a strong incentive to develop reliable and transparent domestic financial frameworks for the rollout of renewable energy. Examples of such domestic frameworks include grid preference for renewables, feed-in-tariffs, Rebid-auctioning schemes, phasing out fossil fuel subsidies in favour of RE & EE and/or renewable energy portfolio standards¹².

Box 1. Impact of Fossil Fuel subsidies

It should also be noted that a major impediment to an economic level playing field for enhanced uptake of large scale renewables are still the prevailing very high subsidies for fossil fuels of almost \$US 2 trillion. A “partial phase out” of fossil fuel consumption subsidies alone could reduce the emissions gap by another 0.4 Gt CO₂ by 2020¹. The IMF has found that removing all post- and pre-tax subsidies for fossil fuels could avoid up to 13 Gt CO₂ annually (IMF. 2013. *Energy Subsidy Reform: Lessons and Implications.*)

⁸UNEP. 2012. Greenhouse Gas Emissions Gap Widening as Nations Head to Crucial Climate Talks in Doha. Available at <http://www.unep.org/newscentre/default.aspx?DocumentID=2698&ArticleID=9335>

⁹IEA (2012) : World Energy Outlook 2012, Paris

¹⁰Climate Analytics (2013) : Adequacy and Feasibility of the 1.5 degree Celsius long-term global limit, Berlin

¹¹WWF/ECOFYS (2011): The Energy Report – 100% Renewables by 2050, Gland

¹²WWF/WRI (2013): Meeting Renewable Energy Targets – Global lessons from the road to implementation, Gland

However, more than doubling the share of renewables by 2020 can only be achieved if there is a simultaneous strong effort on energy efficiency. Such an initiative will reduce the share of demand for fossil fuels and nuclear power. Ambitious and strong energy efficiency interventions by governments are crucial to curtail fossil fuel growth. Once again the UNFCCC could provide a powerful policy signal by adopting an aspirational target to more than double the rate of present annual improvements of energy productivity until 2020. This rate (in energy needs per unit GDP) is presently at 1.2%, which is too low to decouple economic growth and energy consumption and reduce growing demand for fossil fuels¹³.

Scaling up renewable energy is not only good for the climate but also offers strong developmental co-benefits when they replace fossil fuel-based infrastructure. The developmental benefits of RE & EE over fossil fuel include: minimizing local environmental impacts, improved health due to reduced air and water pollution, improved energy security, poverty reduction through decentralized energy access, potential for industry development and reduced vulnerability to international oil price shocks etc. Energy efficiency measures reduce the need to build new energy infrastructure and increases economic competitiveness by reducing the energy input costs for producers.

JUSTIFICATION FOR ACTION ON RE & EE UNDER THE CONVENTION

WWF believes that an initiative to scale up RE & EE would fall squarely within the mandate of the United Nations Framework Convention on Climate Change (UNFCCC).

First and foremost such action is exactly what is necessary to ensure the fulfillment of the ultimate goal of the Convention¹⁴: *“stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”*. Scaling up Renewable energy and energy efficiency would reduce the primary source of greenhouse gasses namely, fossil fuel combustion for energy.

Article 3.3 on Principles notes that Parties should take measures to prevent and mitigate climate change, and *“such policies and measures should take into account different socio-economic contexts, be comprehensive, cover **all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise **all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.**”*** The UNFCCC has been strengthening its ability to support a range of actions by Parties, and these efforts can be cooperative actions such as, RE & EE scale up, agreed by a group of parties or indeed all parties.

In Article 4, paragraph 1.c all Parties committed to

*“Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent, anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the **energy, transport, industry, agriculture, forestry and waste management sectors.**”*

Measures to scale up Renewable Energy and Energy Efficiency also fall clearly under the responsibilities of parties listed in article 4.1, paragraph b and f.

Furthermore, in paragraph 4.5 of the UNFCCC developed country Parties are called on to

*“take all practicable steps to **promote, facilitate and finance, as appropriate, the***

¹³IEA (2012) : World Energy Outlook 2012, Paris

¹⁴United Nations Framework Convention on Climate Change. 1992. Article 2

transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties...”

Articles 4.3 and 4.7 further emphasize this responsibility of developed country parties.

A FRAMEWORK FOR ACTION UNDER THE UNFCCC

There are already many initiatives to implement RE & EE across the world. However, the pace and scale of these initiatives are not ambitious enough. The UNFCCC could play a unique and irreplaceable role in scaling up such initiatives by using the weight of its legitimacy, institutions and global coordination power.. Explicit and targeted support from the global climate regime can help to ensure that RE & EE technologies are scaled up fast enough to avert disastrous levels of climate change in line with an objective to keep global warming well below 2°C. No other forum has the inclusiveness, institutional structure and necessary mandate to address the range of potential targets, standards and mechanisms required to take the transformative actions needed across different sectors, regions and national circumstances to put the world on a path to a low emissions future where both the climate and development prospects are protected. Success in rolling out this initiative would also create much-needed positive momentum within the UNFCCC.

The UNFCCC can and should play both a normative and implementation role in international environmental governance. The Convention’s capacity to support implementation of ambitious actions has been greatly enhanced in recent years, particularly through its financial and technology mechanisms. At the same time, it is a forum where parties create the governing framework, principles, rules, commitments and actions for global climate mitigation and adaptation efforts. Commitments and actions can be of different natures. Agreement on economy-wide CO₂ reduction targets have been the principal focus of multilateral efforts to date, but other kinds of commitments and actions also exist, and could play an important role in enhancing cooperation and creating the conditions for meeting much more ambitious reduction targets. The UNFCCC could play a central role in scaling up global efforts, through agreeing on a range of actions driven by agreed targets, standards, and/or incentives. Particular roles that WWF proposes the UNFCCC may fulfill include:

- Acting as an aggregator of various existing RE & EE initiatives in relevant international forums and national contexts in order to create a common understanding of what those initiatives as a whole contribute to stabilizing atmospheric GHG levels. Without an internationally coordinated response through the UNFCCC it will take too long for these technologies to scale up to the level required to avert disastrous climate change.
- Serving as a strong policy signaling institution for increasing investment in RE & EE initiatives. The participation of all governments in the UNFCCC would send an unmistakable signal to market players about the nature of future of energy systems
- Adding increased legitimacy and urgency to national RE & EE policies by strengthening the links between domestic and international efforts combat climate change.
- Ensuring that the institutions created under the UNFCCC provide the capacity building, technology transfer and financial support required to bring about a rapid scale up of RE & EE technologies.

- Coordinating and monitoring the cumulative impact of voluntary RE & EE targets and actions towards closing the emissions gap, by developed countries and others that are ready to add these to their existing pledges.
- Coordinating RE & EE NAMAs and using the financial, technology and capacity building institutions of the UNFCCC to ensure rapid implementation of these NAMAs.
- Launching processes to develop energy efficiency standards for equipment in sectors such as cars, lighting and appliances. Policies may be based on the top-runner legislation in Japan or the Eco-Design Directive in Europe and on passive-house requirements in several countries and regions already.
- Using an RE & EE initiative as a pilot program that can be replicated to scale up other complementary measures over the next few years.

GUIDING PRINCIPLES AND CRITERIA FOR INITIATIVES

As the UNFCCC moves to play a catalyzing role in the scaling up of complementary mitigation measures such as global scaling up of RE & EE, it would be useful for parties to agree on a set of core principles and criteria to guide their work on such initiatives. Common principles and criteria ensure that all Parties are working from the same assumptions and could help to streamline decisions, especially on particular interventions and in prioritizing the next set of initiatives. These principles and criteria should include:

- *Non-substitution of national GHG targets:* In order to give all parties to the UNFCCC reassurance that pre-2020 complementary initiatives will not substitute increased national GHG emission reduction targets, it needs to be clear that these initiatives will not take the place of scaled up Annex 1 GHG emission reduction targets.
- *Pragmatism and urgency based on the precautionary principle:* Negotiations under the pre-2020 track should strive to achieve short-term action-oriented results and not be used as precedent to influence the negotiations for a post-2015 climate agreement. The primary aim is to find innovative ways to urgently ensure that emissions peak well before 2020.
- *Environmental integrity and transparency:* Parties should ensure that all actions taken under pre-2020 complementary initiatives are clearly defined and explained in a way that gives confidence that every party is fulfilling their commitments and that these actions are leading to actual emission reductions.
- *Simplicity:* The urgency of bringing global emissions to a peak means that Parties should strive to keep the structure of pre-2020 complementary initiatives as simple as possible. There is neither time, nor an appetite for creating further complicated bureaucracy. The implication of this principle will be that any initiatives need to build upon existing institutions as far as possible
- *Urgency and rapid implementation:* Given that the pre-2020 negotiations track needs to bring about a peak in global emissions as near as possible to 2015, it is imperative that attention be focused on initiatives that could be rapidly implemented and lead to net emission reductions over the next 2-6 years.
- *Scalability:* In order to have a large enough impact in closing the emissions gap the UNFCCC needs to focus its attention on initiatives that could be scaled up at a global level to achieve emission reductions at the necessary scale.

- *Long-term viability and sustainability*: Pre-2020 initiatives need to be primarily focused on bringing about a peak in greenhouse gas emissions. However, they should also support long-term viability and sustainability so that resources are not wasted on short term, unsustainable technologies or interventions.

DECISION-MAKING AND INSTITUTIONAL ARRANGEMENTS TO LEVERAGE ACTION

For the UNFCCC to be able to play an effective facilitative and coordination role in scaling up RE & EE, it would have to set up an overarching framework for action. This framework would have to leverage the capacities of existing institutions, the convening power of the UNFCCC and the work already being done outside the Convention, in a way that can lead to replication of easily implementable RE and EE initiatives.

Priority actions to be agreed at COP19

WWF believes that the best way to move the RE & EE initiative forward would be to agree on the following set of decisions at COP 19 in Warsaw:

1. Formally establish an initiative to scale up RE & EE under the ADP and mandating an appropriate **existing** body (possibly the Technology Executive Committee or Climate Technology Network Centre) to coordinate activities and report back to the ADP.
2. Mandate the relevant mechanisms dealing with means of implementation under the UNFCCC (eg. Green Climate Fund, TEC) to prioritise the rapid and scaled up rollout of RE & EE.
3. The mandated body, tasked with dealing with this could take the following actions amongst others: invite parties and other stakeholders to identify concrete financing and technology needs and potential sources to scale up RE & EE; Improved bilateral, multilateral and regional cooperation and exchange of experience and best practices; convene expert practitioners to provide inputs on what they perceive to be the barriers to further rollout of RE & EE.
4. Agreement that during 2014 developed countries that are willing to lead will pledge targets for renewable energy scale-up to 2020 in line with an aggregate objective of 25% renewable energy by 2020 (excluding traditional biomass). Countries must indicate how these targets are clearly additional to already existing targets.
5. Agreement that developing countries, that are willing to do so, will submit additional NAMAs on RE & EE initiatives to the Registry. These countries should clearly indicate what support would be necessary for them to achieve their targets.
6. Agreement that in 2014 countries will present energy efficiency objectives for their economies per unit of GDP and indications from developing countries on what support will be necessary for them to achieve these objectives. Developing countries that are not ready to submit economy wide emission reduction commitments, could submit additional energy efficiency NAMAs to the registry.

Reporting Additional Atmospheric Impact

By COP20 Parties should also agree that they would use existing reporting structures such as the biennial reports, biennial update reports and the NAMA registry to indicate action under this initiative as separate inscriptions. Such a decision would guarantee that onerous, costly reporting requirements do not discourage parties from taking action under this initiative. It would also ensure that emission reductions that are achieved through this initiative under the convention have resulted in a real impact in closing the emissions gap.

TIMELINE FOR THE ROLLOUT OF RE&EE AND OTHER INITIATIVES

Recognizing that it could take several years for the atmospheric impacts of emission reduction activities to be realized, WWF proposes the timeline outlined below as an urgent response by Parties to move to an implementation phase under this initiative.

2013 COP19 Warsaw:

1. Parties establish an initiative under the ADP initiative to scale up RE and EE rollout at a global scale.
2. Parties agree on the principles to guide decisions for pre-2020 complementary initiatives.
3. Parties nominate an appropriate existing body under the UNFCCC to manage implementation and to convene expert groups under the guidance of the ADP and/or COP.
4. Leading developed country parties commit to produce additional RE and EE targets during 2014 and leading developing countries agree to submit RE & EE NAMAs.
5. Parties should identify other pre-2020 complementary measures that can be implemented and rolled out before 2020.

June 2014 Intersessional meeting:

1. Agreement to address identified barriers to the RE & EE rollout
2. Preparation of negotiation text to be adopted during COP20 that includes potential areas of cooperation, concrete activities and incorporation within the MRV framework.

2014 COP20 Lima:

1. Formal tabling of RE & EE targets and NAMAs
2. Adoption of decision text on the rollout of RE and EE, including agreement on an aspirational global target of 25% renewable energy (excluding traditional biomass) and improving the rate of improvement of energy productivity to 2.4% by 2020.
3. Formal acceptance of submitted Party targets and NAMAs to scale up RE & EE.
4. Agreement on guidelines within the existing MRV framework for Parties to report on the implementation of RE & EE scale up.
5. Agreement on further sets of pre-2020 complementary measures, as identified at COP 19, that can be implemented and rolled out before 2020.

2015

1. Rollout of additional RE & EE projects
2. UNFCCC develops and implements further complementary measures to ensure the closing of the emissions gap before 2020.

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